

Applicants: Rodney Rothstein et al.  
Serial No.: 09/814,661  
Filed: March 22, 2001  
Page 2

Amendment to the claims:

Please replace the claims with the listing of claims below.

1. - 13. (cancelled)

14. (previously presented) A screening assay for identifying a compound that is capable of reducing the division rate of a cell which comprises:

- (a) contacting the cell with a compound determined to mimic the binding of Sml1 protein to the large subunit of ribonucleotide reductase (Rnr1), which Sml1 protein comprises amino acids having the amino acid sequence set forth in SEQ ID NO: 2, and
- (b) comparing the division rate of the cell in step (a) with the division rate of the cell in the absence of the compound so as to determine whether the compound reduces the division rate of the cell, thereby identifying a compound capable of reducing the division rate of the cell.

15. (currently amended) The screening assay of claim 14, wherein the compound is ~~an organic compound~~, a peptidomimetic[[,]] or a fragment of Sml1 protein ~~or a synthetic compound~~.

16. (cancelled)

17. (previously presented) The screening assay of claim 15,

Applicants: Rodney Rothstein et al.  
Serial No.: 09/814,661  
Filed: March 22, 2001  
Page 3

wherein the fragment is from about 20 amino acids to about 90 amino acids in length.

18. (original) The screening assay of claim 14, wherein the cell is a yeast cell, a mammalian cell, a plant cell, an insect cell or a microbe.
19. (original) The screening assay of claim 18, wherein the mammalian cell is a human cell, a hamster cell, a mouse cell, a rat cell or a monkey cell.
20. - 36. (cancelled)